the family *Oleacinida*. Studies have also been made of the snails collected in Arizona in 1906, an account of which will shortly be ready for publication.

Mr. E. G. Vanatta has given careful and efficient assistance in the work of the department.

H. A. Pilsbry,

Special Curator.

# REPORTS OF THE SECTIONS.

THE BIOLOGICAL AND MICROSCOPICAL SECTION.

Nine stated and several informal meetings have been held during the year with the usual attendance.

The following communications were made:

On Filaria sanguinis hominis, by Dr. T. S. Stewart.

On Amphigyra alabaminensis, and on an apparatus for showing polarized light, by Mr. F. J. Keeley.

On motion of diatoms, by Mr. T. Chalkley Palmer.

A paper "On Consciousness of Micro-Organisms," by Mr. John G. Rothermel, was presented to a large audience by request in the Library Hall.

Dr. Sylvester J. Deehan, by invitation, read a paper "On the House Fly and Its Relation to Public Health."

Shorter communications on various subjects were made by Messrs. J. A. Shulze, William B. Davis, Silas L. Schumo, Hugo Bilgram, Dr. J. C. Morris and C. S. Boyer.

The semi-centennial anniversary of the founding of the Section will occur on March 30, 1908. Of the twenty-seven original members but few are now living; it is hoped, however, that the occasion may be the means of some commemoration of the work of the Section.

The following officers were elected for the year 1908:

Director,J. Cheston Morris, M.D.Vice-Director,T. Chalkley Palmer.Recorder,Charles S. Boyer.Corresponding Secretary,Silas L. Schumo.Treasurer,Thomas S. Stewart, M.D.Conservator,F. J. Keeley.

Charles S. Boyer, Recorder.

### MINERALOGICAL AND GEOLOGICAL SECTION.

The Section has this season continued its meetings and excursions with renewed vigor and success.

There have been nine meetings, with an average attendance of ten. Communications were made by Mr. Lynwood F. Garrison on gold in pegmatite and related rocks, and on metallic sulphides in volcanic tuffs; by Mr. E. T. Wherry on luminescent minerals, and on his summer observations in northern New Jersey; by Mr. T. Chalkley Palmer on the geography and geology of the region around Richmond, Va.; by B. S. Lyman on a trip to the Philippines, and on a new rock-section grinding machine; by Dr. Florence Bascom on some Mexican volcanoes; by Dr. William J. Sinclair on the geology of the Yosemite Valley. There were a number of shorter communications, besides active discussions.

There were nine field excursions, with an average attendance of over twenty-eight. The parties examined: (1) The structure of Plymouth Valley, between Camp Hill and Chestnut Hill, Montgomery County; (2) The crystalline rocks and their minerals near Media, Delaware County; (3) The structure of Plymouth Valley, between Fort Washington and Glenside, Montgomery County; (4) The crystalline rocks and their minerals between Swarthmore and Lansdowne, Delaware County; (5) The Cambrian and Precambrian rocks between Edge Hill and Paper Mills, Montgomery County; (6) The New Red rocks in the Perkiomen Valley, Montgomery County; (7) The crystalline rocks between Chester and Morgan Station, Delaware county; (8) The New Red and Cambrian conglomerates between Yardley and Fallsington, Bucks County; (9) The crystalline rocks and their minerals between Bethayres and Bustleton, Montgomery and Philadelphia Counties. The excursions are occasionally enlivened by interesting and instructive discussions of the phenomena observed.

The membership of the Section has increased by two associates, at least one of whom will doubtless next month become a member. Another associate has already this year become a member.

The following officers of the Section have been elected for the year 1908:

Director, Benjamin Smith Lyman.
Vice-Director, George Vaux, Jr.
Recorder and Secretary, Edgar T. Wherry.
Treasurer, Miss Emma Walter.
Conservator, Frank J. Keeley.

Respectfully submitted by order of the Section,
Benjamin Smith Lyman, Director.

### THE ENTOMOLOGICAL SECTION.

The regular monthly meetings have been held, except during the months of July and August. Valuable communications by the members have been permanently recorded in the *Proceedings* of the Section and published in the *Entomological News*. The average attendance was twelve persons, not including visitors. Eight tin cases containing two hundred Schmitt boxes have been purchased to accommodate the growth of the collection and any new arrangement found necessary. Over 11,000 specimens have been added to the cabinet during the year. The most noteworthy additions have been 2,083 insects of all orders from Paramaribo, Surinam; 3,424 Hymenoptera, presented by Mr. Henry L. Viereck; 700 Orthoptera from Florida and 2,500 from the Southwestern United States, captured by Mr. J. A. G. Rehn and Mr. Morgan Hebard; two specimens of the very rare butterfly, *Argynnis astarte*, from Mt. Athabasca, were presented by Mrs. Charles Schäffer.

The Conservator of the Section spent five weeks collecting for the Academy in the Canadian provinces of Manitoba, Saskatchewan and Alberta, and brought home a large amount of material. Quite a number of the species collected were new to our cabinets, and it is not unlikely that new species will be found when time permits the proper study of this collection. A large part of the additions came unmounted, and a considerable portion of the Conservator's time was occupied in preparing it for the cabinet. The usual and necessary work for the care and preservation of the collections has been done, and new and better methods of technic have made this work very much more satisfactory. The Entomological News, the journal published under the direction of the Section, has been continued and Volume XVIII completed with 458 pages and 17 plates. Two hundred and ninety-eight pages and 4 plates of the Transactions of the American Entomological Society have been published. The Conservator wishes to acknowledge valuable assistance in the care and arrangement of special collections from Dr. Philip P. Calvert, Mr. J. A. G. Rehn and Mr. E. T. Cresson, Jr.

Director,			Philip Laurent.
Vice-Director,			H. W. Wenzel.
Treasurer,			E. T. Cresson.
Conservator,			Henry Skinner, M.D.
Secretary,			J. H. Ridings.

Respectfully submitted,

Henry Skinner,

Conservator.

### THE BOTANICAL SECTION.

During the past year the work of placing the sheets in species covers has been completed for about three-fourths of the herbarium; pressure of other work and lack of assistance have delayed progress for the time being; it is hoped, however, that the arrangement may be completed during the coming year.

Early in the year six new metal cases were received and have been placed in the north gallery room for the accommodation of the ferns and fern allies with the mosses and lichens, the change of arrangement being required by the rapid growth of the local herbarium.

Additions to the collections amount to about 5,500 sheets. Of these, exchanges have been received from the New York Botanical Gardens of 174, principally from the Bahamas, and the University of Pennsylvania. 147 from Bermuda. Gifts have been received from the St. Louis Botanical Gardens, 565 numbers of Lindheimer's Texan plants, and about 750 from the following individuals: Edwin B. Bartram, Stewardson Brown, Joseph Crawford, Mrs. Thomas P. Hill, Bayard Long, C. F. Saunders, Benjamin H. Smith, Edward G. Vanatta, Samuel S. Van Pelt and Charles S. Williamson.

The Academy's expedition to Arizona and New Mexico under Dr. Pilsbry added 238 sheets, and the following have been added by purchase: By the Academy, a small collection of Surinam plants, and by the Botanical Section, 425 sheets of the Pere Duss herbarium from Martinique and Guadeloupe; from A. A. Heller, 470 sheets of California plants, and from C. G. Pringle, 300 Mexican plants.

An increasing interest has been manifested during the year in the meetings of the Philadelphia Botanical Club, its members having added 2,500 sheets to the local herbarium. Acknowledgment is here made of the efficient work rendered by its Curator, Mr. Samuel S. Van Pelt.

At the annual meeting of the Section, held December 5, the following were elected as officers for the ensuing year:

Director,..Benjamin H. Smith.Vice-Director,..Joseph Crawford.Recorder,..Charles S. Williamson.Treasurer and Conservator,.Stewardson Brown.

Respectfully submitted,

Stewardson Brown,

Conservator.

## THE ORNITHOLOGICAL SECTION.

During the past year the remainder of the mounted collection of birds, comprising the ostriches and their allies and the song birds, have been arranged on the new Ornithological floor in cases provided for them, and the work of relabelling the Picariæ, Passeres, etc., has been begun.

The greater part of the Conservator's time, apart from general museum work, has been devoted to a thorough revision of the study series of bird skins. Before installing the extensive Tristram collection it was found necessary to reidentify the old material and bring the nomenclature up to date. At the same time all species represented in the collection have been checked up in Sharpe's Hand List of Birds, so that it is possible to ascertain at a glance the Academy's desiderata. This work has been completed from the Parrots to the Song Birds, this portion of the collection occupying eighty of the standard metal cases.

Mr. J. A. G. Rehn has spent about six months' time in relabelling the Tristram collection, amplifying the tags from the manuscript catalogue, and has completed about one half of this material. He has also relaxed many of the old unmounted specimens and greatly improved their appearance.

Numerous accessions have been received during the year, among which may be mentioned a collection of Brazilian birds from Mrs. Thomas Gummey, a raven's nest and other specimens for the Delaware Valley Club collection.

A special mahogany and plate glass case was finished early in the year for the display of the Great Auk and the Labrador Ducks, and twelve additional metal cases have been purchased for the study collection.

The Delaware Valley Ornithological Club and Pennsylvania Audubon Society have held their meetings at the Academy during the year, and many visiting ornithologists have made use of the collections.

WITMER STONE,

Conservator.

VICE-Presidents, . . . . . . . . . . . . Arthur Erwin Brown, Sc.D.

E. G. Conklin, Ph.D.

RECORDING SECRETARY, . Edward J. Nolan, M.D.

Corresponding Secretary, J. Percy Moore, Ph.D.

Treasurer, . . . George Vaux, Jr.

Librarian, . . . Edward J. Nolan, M.D.

CURATORS, . . . Arthur Erwin Brown, Sc.D.

Samuel G. Dixon, M.D., Henry A. Pilsbry, Sc.D.

William S. Vaux, Jr.

COUNCILLORS TO SERVE THREE YEARS, Thomas H. Fenton, M.D.,

John Cadwalader, Edwin S. Dixon,

Henry Skinner, M.D.

COMMITTEE ON ACCOUNTS, . . Charles Morris,

Samuel N. Rhoads, Dr. C. Newlin Peirce,

John G. Rothermel, Howard Crawley, Ph.D.

#### COUNCIL FOR 1908.

Ex-officio.—Samuel G. Dixon, M.D., Edwin G. Conklin, Ph.D., Arthur E. Brown, Sc.D., Edward J. Nolan, M.D., J. Percy Moore, Ph.D., George Vaux, Jr., Henry A. Pilsbry, Sc.D., William S. Vaux, Jr.

To serve Three Years.—Thomas H. Fenton, M.D., John Cadwalader, Edwin S. Dixon, Henry Skinner, M.D.

To serve Two Years.—Dr. C. Newlin Peirce, Philip P. Calvert, Ph.D., Thomas Biddle, M.D., and Frederick Prime.